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09/891,886

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Pingnan Shi

78508 (36-115 US)

2419

27975

7590

02/27/2008

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EXAMINER

SHEPARD, JUSTIN E

ART UNIT

PAPER NUMBER

2623

NOTIFICATION DATE

DELIVERY MODE

02/27/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

09/891,886

Applicant(s)

SHI ET AL.

Examiner

Justin E. Shepard

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 8-10 and 12-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-10 and 12-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/28/07 has been entered.

Response to Arguments

Applicant's arguments filed 10/29/07 have been fully considered but they are not persuasive.

Page 10, Rejection of Claim 1 section:

Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

Page 16, Rejection of Claim 2 section:

In the second paragraph, the applicant argues that Liu does not disclose a dual mode receiver. Referring to figure 1, Liu discloses a dual mode receiver (column 4, lines 56-65) that refers to HD and SD digital signals. While this section does not specifically teach a dual mode American/British receiver, the background refers to needing a dual mode receiver that works with both American and British standards.

Therefore one of ordinary skill of the art could see that Liu teaches a dual mode receiver that includes a plurality of standards, including both American and British standards.

Page 18, Rejection of Claim 3 section:

In the second paragraph, the applicant argues that Stockhill teaches away from the CATV tester disclosed by Kitamura and Liu. As Kitamura (Abstract), Liu (column 4, lines 56-65) and Stockhill (Abstract) all refer to television receivers; it is the examiner's opinion that these references can be combined because they are all similar devices.

Page 19, Rejection of Claim 4 section:

The applicant argues that Liu does not disclose a dual mode receiver including a SAW filter. Referring to figure 1, Liu discloses a dual mode receiver (column 4, lines 56-65) that refers to HD and SD digital signals. Liu teaches that a SAW filter is used (column 5, lines 34-46) in the receiver, and as Liu is a dual mode receiver it is the opinion of the examiner that Liu would contain 2 SAW filters even though they are not explicitly shown in figure 1.

Page 19, Rejection of Claim 5 section:

This argument has been responded to above.

Page 20, Rejection of Claim 8 section:

The applicant argues that Hessel does not disclose the types of digital demodulation schemes found in the claims. As Kitamura and Liu disclose a system using those demodulation schemes found in the claims, Hessel is used to teach the user interface that is used to select those schemes.

The remaining arguments have either been dealt with above, or they are moot in view of a new grounds of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1, 2, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kitamura in view of Liu in view of Ozkan.

Referring to claim 1, Kitamura discloses a test meter for a digital signal distribution system comprising:

a front end for acquiring a signal carried by the signal distribution system (column 1, lines 37-48; Note: a television is interpreted as being a simple test meter as a user will be able to determine the signal strength by observing the television output);

signal conditioning circuitry having a plurality of signal conditioning circuits (figure 1), each signal conditioning circuit corresponding to a different CATV standard in a

plurality of CATV standards (column 2, lines 19-21), the signal conditioning circuitry being in communication with said front end so as to receive the acquired signal and operative to output a channel signal by applying the acquired signal to the signal conditioning circuit that corresponds to the CATV standard for the acquired signal (column 2, lines 21-25), wherein the channel signal has a bandwidth set by the corresponding CATV standard (column 1, lines 42-44);

a means for analyzing at least one parameter of the signal to produce an analysis output (column 1, lines 37-48; Note: the video output is being interpreted as parameter to analyze);

a user interface operative to allow a user to select the CATV standard signal (column 2, lines 19-21).

Kitamura does not disclose a test meter wherein the CATV signals are digital; and with a digital demodulator in communication with said signal conditioning circuitry and operative to select one demodulation scheme from a plurality of digital demodulation schemes to obtain a demodulated signal from the digital channel signal after signal conditioning;

analysis including at least one of message error rate MER, I/O data constellation, equalizer tap values and forward error correction FEC readings; and to receive analysis output containing at least one of video information, audio information, a composite bitstream, closed captioning information and ratings information for display to a user.

In an analogous art, Liu teaches a test meter wherein the CATV signals are digital (column 1, line 67; column 2, lines 1-8); and with a digital demodulator in

communication with said signal conditioning circuitry and operative to select one demodulation scheme from a plurality of digital demodulation schemes to obtain a demodulated signal from the digital channel signal after signal conditioning (column 5, lines 3-7).

At the time of the invention it would have been obvious for one of ordinary skill in the art to add the digital receiving means taught by Liu to the television receiver disclosed by Kitamura. The motivation would have been to create a television capable of being sold in the both the United States and Europe that could receive digital television signals (Liu: column 1, lines 65-67; column 2, lines 1-3).

Kitamura and Liu do not disclose a test meter with analysis including at least one of message error rate MER, I/O data constellation, equalizer tap values and forward error correction FEC readings; and to receive analysis output containing at least one of video information, audio information, a composite bitstream, closed captioning information and ratings information for display to a user.

In an analogous art, Ozkan teaches a test meter with analysis including at least one of message error rate MER, I/O data constellation, equalizer tap values and forward error correction FEC readings; and to receive analysis output containing at least one of video information, audio information, a composite bitstream, closed captioning information and ratings information for display to a user (column 3, lines 7-10; column 4, lines 32-36; column 6, lines 7-15; column 7, lines 21-26; column 7, line 66 to column 8, line 6).

At the time of the invention, it would have been obvious for one of ordinary skill in the art to add the FEC error signal taught by Ozkan to the system disclosed by Kitamura and Liu. The motivation would have been to enable the user to identify the issue with their television signal as to enable the user to better communicate the issue to the cable company, enabling the company to fix the issue more efficiently.

Referring to claim 2, Kitamura does not disclose a test meter of claim 1, wherein the plurality of digital CATV standards comprise ITU-T J.83 Annex A, Annex B, and Annex C and the plurality of digital demodulation decoding schemes comprise QAM and QAM variants.

Liu discloses a test meter of claim 1, wherein the plurality of digital CATV standards comprise ITU-T J.83 Annex A, Annex B, and Annex C (column 5, lines 9-10) and the plurality of digital demodulation decoding schemes comprise QAM and QAM variants (column 5, lines 3-7).

At the time of the invention it would have been obvious for one of ordinary skill in the art to add the digital receiving means taught by Liu to the television receiver disclosed by Kitamura. The motivation would have been to create a television capable of being sold in the both the United States and Europe that could receive digital television signals (Liu: column 1, lines 65-67; column 2, lines 1-3).

Referring to claim 6, Kitamura discloses a test meter of Claim 1, wherein the user interface is operative to allow a user to select one channel signal (column 2, lines 24-25).

Kitamura does not disclose a test meter wherein the CATV signals are digital.

Liu discloses a test meter wherein the CATV signals are digital (column 1, line 67; column 2, lines 1-8).

At the time of the invention it would have been obvious for one of ordinary skill in the art to add the digital receiving means taught by Liu to the television receiver disclosed by Kitamura. The motivation would have been to create a television capable of being sold in the both the United States and Europe that could receive digital television signals (Liu: column 1, lines 65-67; column 2, lines 1-3).

2. Claims 3, 4, and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kitamura in view of Liu as applied to claim 1 above, and further in view of Stockill.

Referring to claim 3, Kitamura does not disclose a test meter of Claim 1, wherein said plurality of signal conditioning circuits comprises a first filter that filters the acquired digital signal in accordance with a first digital CATV standard and a second filter that filters the acquired digital signal in accordance with a second digital CATV standard.

Liu discloses a test meter wherein the CATV signals are digital (column 1, line 67; column 2, lines 1-8).

At the time of the invention it would have been obvious for one of ordinary skill in the art to add the digital receiving means taught by Liu to the television receiver disclosed by Kitamura. The motivation would have been to create a television capable of being sold in the both the United States and Europe that could receive digital television signals (Liu: column 1, lines 65-67; column 2, lines 1-3).

Kitamura and Liu do not disclose a test meter of Claim 1, wherein said plurality of signal conditioning circuits comprises a first filter that filters the acquired signal in accordance with a first CATV standard and a second filter that filters the acquired signal in accordance with a second CATV standard.

Stockill discloses a test meter of Claim 1, wherein said plurality of signal conditioning circuits comprises a first filter that filters the acquired signal in accordance with a first CATV standard and a second filter that filters the acquired signal in accordance with a second CATV standard (column 4, lines 3-13).

At the time of the invention it would have been obvious for one of ordinary skill in the art to add the parallel filtering taught by Stockill to the system disclosed by Kitamura and Liu. The motivation would have been to enable the system to only need one demodulator by utilizing parallel filters.

Referring to claim 4, Kitamura does not disclose a test meter of Claim 3, wherein said first filter comprises a SAW filter operative to filter a first bandwidth according to the first digital CATV standard, and said second filter comprises a SAW filter operative to filter a second bandwidth according to the second digital CATV standard.

Liu discloses a test meter of Claim 3, wherein said first filter comprises a SAW filter operative to filter a first bandwidth according to the first digital CATV standard, and said second filter comprises a SAW filter operative to filter a second bandwidth according to the second digital CATV standard (column 5, lines 39-42).

At the time of the invention it would have been obvious for one of ordinary skill in the art to use the SAW filter taught by Liu in the system disclosed above. The motivation would have been to limit out-of band signal energy (Liu: column 5, lines 41-42).

Referring to claim 5, Kitamura does not disclose a test meter of Claim 4, wherein said first digital CATV standard comprises ITU-T J.83 Annex A and said second digital CATV standard comprises ITU-T J.83 Annex B.

Liu discloses a test meter of Claim 4, wherein said first digital CATV standard comprises ITU-T J.83 Annex A and said second digital CATV standard comprises ITU-T J.83 Annex B (column 1, lines 51-64).

At the time of the invention it would have been obvious for one of ordinary skill in the art to add the digital receiving means taught by Liu to the television receiver disclosed by Kitamura. The motivation would have been to create a television capable of being sold in the both the United States and Europe that could receive digital television signals (Liu: column 1, lines 65-67; column 2, lines 1-3).

3. Claims 8, 9, 10, and 12-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kitamura in view of Liu in view of Ozkan as applied to claim 1 above, and further in view of Hessel.

Referring to claim 8, Kitamura and Liu do not disclose a test meter of Claim 1, wherein said user interface is operative to allow a user to select one digital modulation decoding scheme from the plurality of digital demodulation decoding schemes.

Hessel discloses a test meter of Claim 1, wherein said user interface is operative to allow a user to select one digital modulation decoding scheme from the plurality of digital demodulation decoding schemes (column 4, lines 38-46).

At the time of the invention it would have been obvious for one of ordinary skill in the art to add the user selectable demodulation schemes taught by Hessel to the system disclosed by Emsley and Schmidt. The motivation would have been to enable a user to decode a plurality of different digital standards using a single device.

Claims 10 and 16 are rejected on the same grounds as claims 1 and 8.

Claim 12 is rejected on the same grounds as claim 1.

Claim 13 is rejected on the same grounds as claim 3.

Claims 14 and 17 are rejected on the same grounds as claim 5.

Referring to claim 9, Kitamura does not disclose a test meter of Claim 8, wherein the plurality of digital demodulation decoding schemes includes QAM and QAM variants.

Liu discloses a test meter of Claim 8, wherein the plurality of digital demodulation decoding schemes includes QAM and QAM variants (column 5, lines 3-7).

At the time of the invention it would have been obvious for one of ordinary skill in the art to add the QAM variant decoding taught by Liu to the system disclosed by Kitamura. The motivation would have been to enable the system to be able to work with the most possible systems without addition modifications.

Claims 15 and 18 are rejected on the same grounds as claim 9.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin E. Shepard whose telephone number is (571) 272-5967. The examiner can normally be reached on 7:30-5 M-F.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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JS


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